RHODE ISLAND DEPARTMENT OF PUBLIC SAFETY



RI E-911 UNIFORM EMERGENCY TELEPHONE SYSTEM DIVISION

2023 ANNUAL REPORT



Daniel J. McKee, Governor

Colonel Darnell S. Weaver Director, Department of Public Safety Superintendent, Rhode Island State Police

> Arthur J. Martins Director, Rhode Island E-911

311 Danielson Pike North Scituate, RI 02857 Telephone: (401) 459-0911

Fax: (401) 459-0933 Website: RI911.RI.GOV

Director's Message

I am pleased to present the Rhode Island E-911 2023 Annual Report. This document summarizes the overall activities of the agency and our ability to meet the public safety needs of the community and all those whom we serve.

As the State of Rhode Island's first, "first responders," the agency processed 497,298 E-911 calls in calendar year 2023. This represents an increase of approximately 4% when compared to 2022, when the agency processed 477,270 calls.

Of the 497,298 E-911 calls received in 2023, 340,638 of these calls were transferred to a local, state, or federal emergency response agency. The difference in total incoming calls and total transferred calls is because certain incidents will generate multiple calls to E-911. For example, fires and motor vehicle collisions will typically result in multiple duplicate calls.

RI E-911 also receives calls of a non-emergency nature, as well as routine test calls from various entities, that are used to verify that the technology is working as intended. These calls contribute to the total number of calls received and processed, but are generally not transferred to an emergency response agency such as a police or fire department.

Additionally, agency personnel also completed 101,966 call backs due to dropped, disconnected, abandoned, or hang up calls. These calls are treated as emergencies. 911 telecommunicators will return the call, leave a message, and send emergency responders to conduct a well-being check of the premises if the return call is not immediately answered.

In July 2022, the agency implemented Emergency Medical Dispatch (EMD). EMD is a highly structured system that enhances medical services and provides pre-arrival instructions from our telecommunicators (call-takers) to those calling 911 for a medical emergency. The procedures utilized by the telecommunicators allow them to quickly assess the caller's most likely type of medical emergency, thus providing critical information required to send the appropriate personnel and equipment to the medical emergency. The essential medical information needed to evaluate and process the call is obtained when the telecommunicator asks specific questions of the caller, as well as the corresponding answers provided by the caller. Based on the acquisition of the essential information provided by the caller, the telecommunicator can determine the most likely type of medical problem being experienced and will be able to provide comprehensive instructions to the caller prior to the arrival of emergency responders. These directives may include life support instructions (CPR), how to control severe bleeding, and many other types of conditions that require immediate emergency medical attention. Furnished with this critical information, our telecommunicators can relay vital data to the emergency responders while they are enroute to better prepare them for the emergency they will encounter upon their arrival.

The amount of time required to process any 911 emergency call has increased with the introduction of EMD. Prior to the implementation of EMD, it took, on average, approximately one minute and thirty-five seconds (1:35) to process any 911 call. This average is based on data derived from 2018-2021.

The average amount of time it took to process any 911 call in 2022 was two minutes (2:00). It is important to note that EMD was operational only during the last six months of 2022. The amount of time it took to process any 911 call from January 1, 2022, through June 30, 2022, was one minute and forty-three seconds (1:43); the amount of time it took to process any 911 call from July 1, 2022, through December 31, 2022, after the implementation of EMD, was two minutes and fifteen seconds (2:15).

The amount of time required to process a 911 emergency medical call has also shown an increase with the introduction of EMD. Prior to the implementation of EMD, it took on average one minute and forty-five (1:45) seconds to process an emergency medical call. This average is based on data derived from 2018-2021.

The amount of time required to process a 911 emergency medical call from January 2022 to June 2022, was two minutes and five seconds (2:05); the amount of time to process a medical call from July 2022 to December 2022, with the use of EMD, was four minutes and nine seconds (4:09).

The average amount of time it took to process any 911 emergency call in 2023 was two minutes and eight seconds (2:08). In 2023, the amount of time needed to process a medical call was three minutes and forty-nine seconds (3:49). This represents a reduction from the average amount of time to process a medical call in the second half of 2022, which was four minutes and nine seconds (4:09). The amount of time to process a medical call may reduce slightly in the future, but significant reductions in time are not expected based on the analysis of the data acquired over the past eighteen (18) months. The increase in medical call processing time is directly related to the questions our telecommunicators ask when processing a medical call within the EMD protocols.

In 2022, the agency processed 133,151 medical calls. In 2023, the agency processed 126,956 medical calls. This represents a reduction of approximately 5%. It is difficult to predict the number of medical calls the agency will receive in the future, but with the increase in population and the prevalence of mobile cellular communication devices, it is expected to rise slightly.

Workflow calls in queue (calls not immediately answered and temporarily referred to an automated message), opioid calls, domestic violence calls, depression calls, EMD calls, and many other measurements are evaluated to understand any developing trends and are used to support our partner public safety agencies. We will also use this data as a basis to adjust our operating procedures, if necessary, to improve service delivery for those calling 911 in an emergency.

A priority for 2024 and beyond is our ability to address the challenges of attrition, recruitment, and retention. There is a continuous effort to streamline the hiring process to meet the staffing demands necessary to support the needs of an efficient and effective Public Safety Answering Point (PSAP or call center). We have undertaken a vigorous effort towards recruiting personnel. In addition to placing vacancy announcements on the State's personnel website, advertising in newspapers, publicizing our vacancies on multiple social media platforms, working closely with the State of RI's Division of Equity, Diversity, and Inclusion, we have also begun to attend job fairs at various colleges and universities using some of our enthusiastic employees who showcase the benefits and realistic expectations of the profession. This outreach has been met with success and we will continue these recruitment efforts and educational practices in the future.

In 2023, the agency participated in two recruitment drives. The first one, conducted in February, resulted in 124 applicants; the second recruitment, conducted in December, produced 229 applicants.

In 2023, the agency lost a total of 12 telecommunicators and supervisors throughout the course of the year. One member retired from the agency, seven staff members left the agency for other employment opportunities elsewhere, and the other 4 employees left for an unknown reason. During the same time the agency was able to hire 15 personnel and were able to retain 13 of these employees. The agency currently has 11 vacancies and hopes to have these positions filled with the recruitment that was completed in December 2023.

During 2021, the agency began the deployment of Voice over Internet Protocol (VoIP) to replace legacy copper wire, and analog phones. The technology provides additional caller information, which was not previously available for the E-911 telecommunicators to transfer to local, state, or federal emergency response agencies. This project was completed in the summer of 2023.

All agency members have attained FEMA certifications in IS100 and IS200. This will permit the agency to become eligible to apply for certain federal grants and develop cooperative partnerships with other agencies and groups. RI E-911 is a member of the National Emergency Number Association (NENA), providing our staff with access to a multitude of resources supplied by industry experts.

During 2023, we resumed meetings with the 911 Advisory Commission after they were cancelled during the COVID 19 pandemic. Meetings were suspended from 2020 through 2022. The meetings will take place every six (6) months moving forward. The Commission members were provided with a myriad of updates related to the delivery of emergency 911 services. Some of the updates included the status of EMD, technological advancements, staffing challenges, recruitment efforts, overall statistical analysis of call volume, and future plans for the agency.

We maintain professional relationships with organizations such as the Rhode Island Association of Fire Chiefs, the Rhode Island Police Chiefs Association, the Rhode Island League of Cities and Towns, the Rhode Island Emergency Management Agency, the National Association of State 911 Administrators (NASNA), the National Emergency Number Association (NENA), Cybersecurity and Infrastructure Security Agency (CISA) along with many other federal, state, local, and private partner agencies, or organizations.

We are proud of the services we provide to the public, and we continually strive to offer the most current technological advances currently available. We want to be known as more than just a number to call (911) in the event of an emergency. We want to be an educational resource for the public concerning the various services we provide, including the opportunities that can be developed through shared informational resources, improved technical solutions, data mining, innovative predicative analytics, and emerging technological advances.

RI E-911 wants to thank the citizens and visitors of the State of Rhode Island for your confidence in our staff. The men and women of RI E-911 work tirelessly to assist you regardless of the time of day and in all weather conditions to provide aid and guidance when an emergency occurs. They will answer your emergency calls with professionalism, and provide you with the most efficient help, service, support, guidance, and assistance available.

Respectfully submitted.

Arthur J. Martins RI E-911 Director

GOVERNANCE AND OVERSIGHT

In 2008 the Rhode Island General Assembly passed Article 9 of House Bill 7390 to reorganize many functions of state government. The major focus of this reorganization was to bring several law enforcement and criminal justice agencies previously under the Department of Administration under one organizational structure. This re-structuring created the Department of Public Safety.

The goal of the consolidation of these agencies was to assure the furnishing of competent professional services; enable the most efficient and effective use of the state's public safety resources; allow for the merging of communications, training, and operating procedures of these agencies; and to protect the lives and promote the safety of the citizens of the State of Rhode Island.

The legislation named the Superintendent of the Rhode Island State Police as the Director of the Department of Public Safety. Accordingly, all these agencies report to the Director of Public Safety is appointed by, reports directly to, and serves at the pleasure of the Governor.

A statutory Advisory Commission acts in an advisory capacity to the Director of E-911. Its composition and function are described in Section 39-21-4 of the General Laws of the State of Rhode Island:

- 39-21-4 Advisory Commission. (a) There shall be an E 9-1-1 Uniform Emergency Telephone System Advisory Commission consisting of fourteen (14) members to be appointed in the following manner: five (5) of the members shall be: the Director of the Department of Health or his or her designee, the Fire Marshal or his or her designee, the Colonel of the Rhode Island State Police or his or her designee, the State Telecommunications Director or his or her designee, and the Administrator of the Division of Public Utilities and Carriers or his or her designee; three (3) members shall be appointed by the Speaker of the House: one of whom shall be a member of the House of Representatives, and one of whom shall be a representative of the Police Chiefs' Association, and one of whom shall be a representative of the telecommunication services provider that is the primary provider to the E 9-1-1 PSAP; three (3) members shall be appointed by the President of the Senate; one of whom shall be a member of the Senate, one of whom shall be a representative of the wireless telecommunication industry; and three (3) members shall be appointed by the governor: two (2) of whom shall be representatives of the public, one of whom shall be representative of the Rhode Island League of Cities and Towns.
 - (b) Members of the Commission shall serve five (5) year terms, except for ex officio members.
 - (c) The Advisory Commission may make such recommendations and give such advice to the Director of the division as it deems appropriate.

Advisory Commission Meetings were suspended due to the COVID-19 pandemic in 2021 and 2022. Meetings resumed in 2023, a meeting was held in May and November. Updates were provided to the Commission Members on the following topics:

- The progress of EMD
- Technological Updates
 - o Internal and External Communications Improvements
 - o Data Sharing
- Staffing Issues/Hiring/Retention
- Statistical Analysis

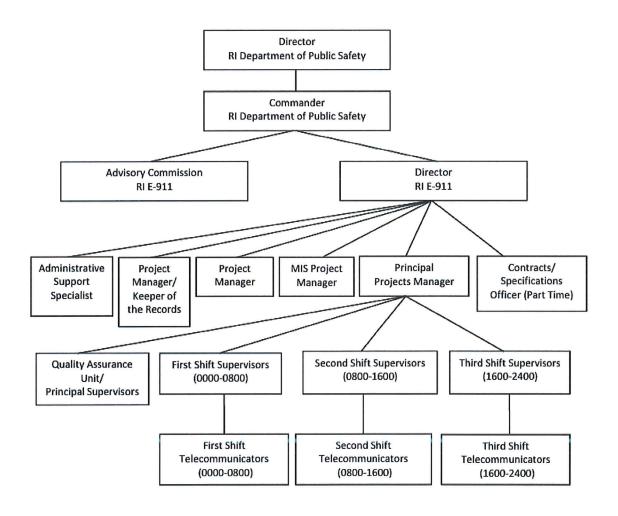
Future meetings will occur bi-annually. Commission Members are committed to the advancement of Rhode Island's Emergency 911 System. The members are steadfast in their support of our operations. The members are willing to provide their assistance, guidance, and direction in meeting our goals and objectives, and fulfilling E-911's public safety mission and responsibilities.

ORGANIZATIONAL CHART

The RI E-911 Uniform Emergency Telephone Agency, like many organizations, is comprised of an Administrative and Operational staff.

The Administrative staff consists of the Director, Principal Project Manager, Contracts and Specifications Officer, three Project Managers, and an Administrative Support Specialist. The Administrative staff leads and supports the agency's operational personnel. The administrative staff performs all the executive functions necessary for the agency to succeed.

The Operational staff consists of the Quality Assurance Unit (QAU), Shift Supervisors and Telecommunicators whose primary objective is to provide an efficient and effective method for Rhode Island residents and visitors to request emergency assistance and guidance by dialing "9-1-1" on traditional landline telephones and wireless cellular telephones (by voice or text). Requests are received in a central statewide communications center and are transferred to the appropriate Federal. State, or local public safety emergency response agencies for notification and rapid response.



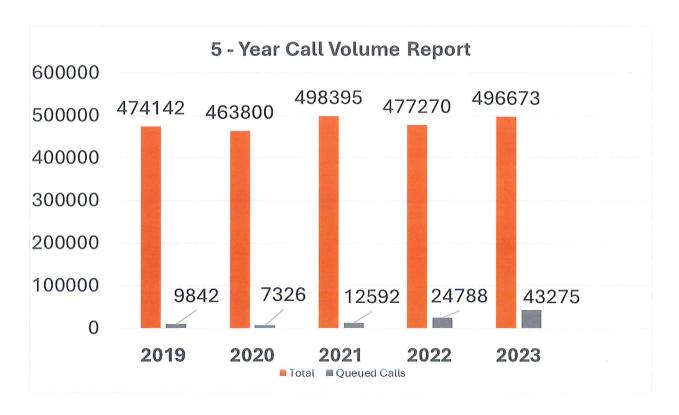
2023 OPERATIONAL STATISTICS

Call volume reports are generated weekly, monthly, quarterly, semi-annually, and annually through the combined efforts and data processing skills of our E-911 Administrative Staff, Principal Supervisors, Shift Supervisors, and technology vendors.

In 2023, RI E-911 received a total of 497,298 incoming calls. Of these calls, 340,638 of them were transferred for an emergency response. The difference in total incoming calls and total transferred calls is because certain incidents, such as fires and motor vehicle collisions, will generate multiple duplicate calls. E-911 also receives dropped or hang up calls, calls of a non-emergency nature, as well as routine test calls which is used to verify and authenticate that the technology is working as intended. These calls contribute to the total number of calls received but do not result in a transferred call.

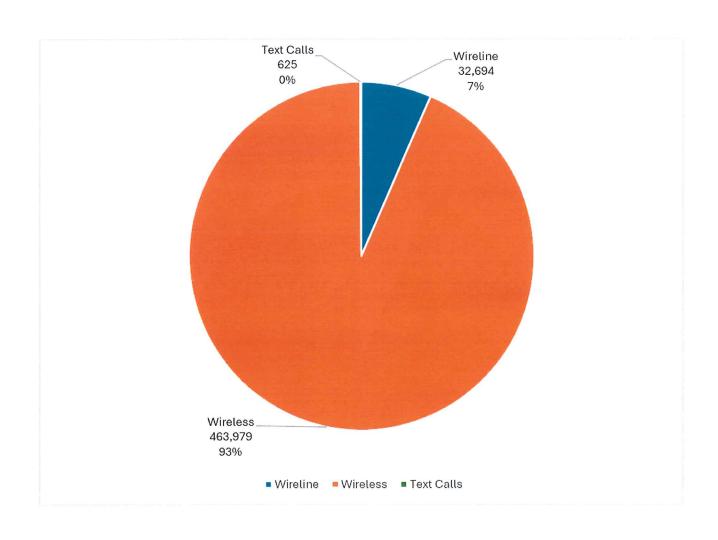
Wireless calls accounted for 93% of the total call volume. This information along with transferred call data can be found on the bottom of this page and the next two pages of this document.

Calls in queue (calls not immediately answered and temporarily referred to an automated message) have varied over the past five years. In 2019, the number of calls in queue and the corresponding percentage was 9,842 calls (2.07%); in 2020 it was 7,326 calls (1.57%); in 2021 it was 12,592 calls (2.52%); in 2022 it was 24,788 calls (5.19%); and in 2023 it was 43,275 calls (8.71%). The increase observed in 2022 and 2023 was related to the implementation of EMD and the staffing problems experienced by the agency. Improving EMD proficiency and hiring additional staff to reach full complement levels will likely have a positive impact on this data.



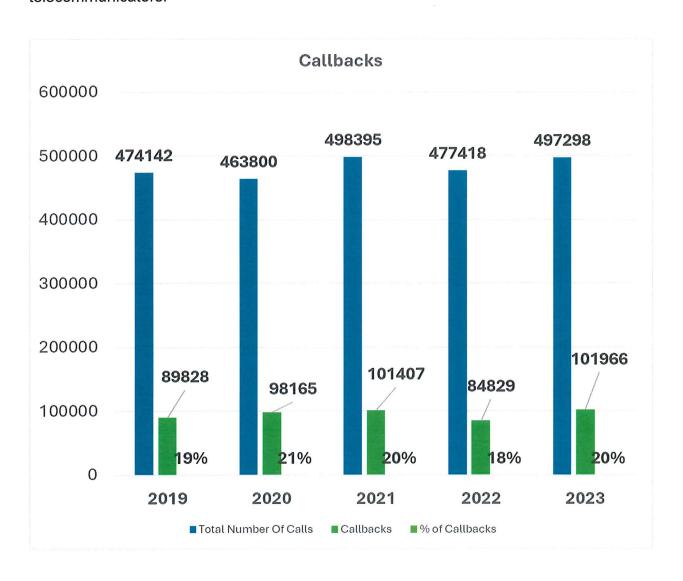
Incoming 911 Calls for 2023

<u>Description</u>	<u>Total</u> <u>Calls</u>	Percentage of Calls
Wireline	32,694	7%
Wireless	463,979	93%
Text Calls	625	0.1%
Total Incoming Calls	497,298	100%



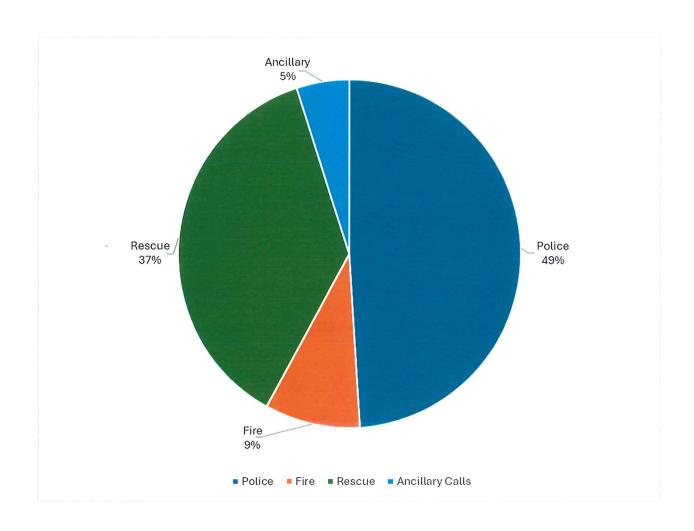
Callbacks

In 2023, agency personnel completed 101,966 call backs due to dropped, disconnected, abandoned, or hang up calls. These calls are treated as emergencies. Telecommunicators will return the call, leave a message, and send emergency responders to conduct a well-being check of the premises if the return call is not immediately answered. This activity is necessary to direct emergency responders to potential emergencies in the event the person in need is incapacitated or unable to speak due to the nature of the emergency. Over the past five years, callbacks have consistently accounted for approximately 20% of the workload for 911 telecommunicators.



Transferred 911 Calls for 2023

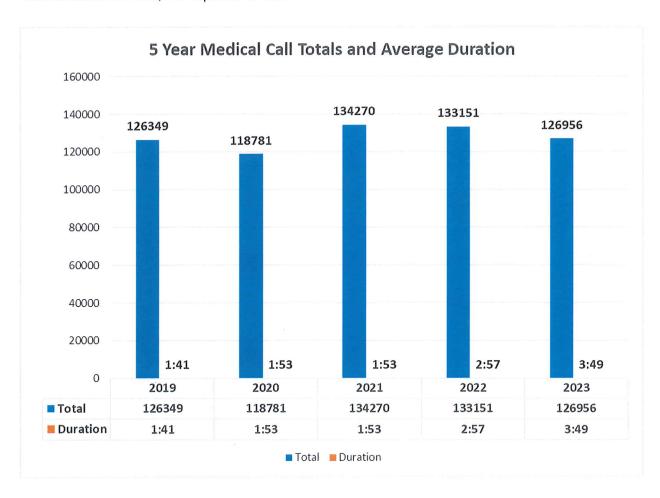
<u>Description</u>		<u>Total</u> <u>Calls</u>
Police		49%
Fire		9%
Rescue		37%
Ancillary Calls		5%
	Total	100%
Total Transfers		340,638



Emergency Medical Dispatch (EMD) Calls

Emergency Medical Dispatch (EMD) was implemented in July of 2022 and is a highly structured system that enhances medical services and pre-arrival instructions provided by our telecommunicators (call-takers) to those calling 911 in a medical emergency. The amount of time needed to process an emergency medical call has increased because of the implementation. Prior to EMD, an emergency medical call averaged just under two minutes. The time required to accurately process an EMD call has increased to nearly four minutes in 2023. We will continually monitor this data to determine if any modifications to the agency's rules, regulations, or policies are required. We will also be closely analyzing this data to determine if any adjustments to our staffing levels will be necessary.

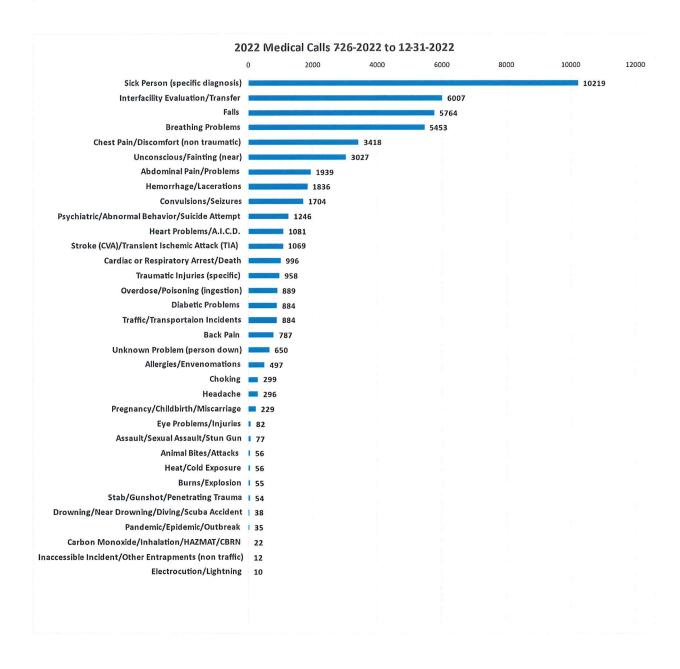
The number of medical calls has varied over the past five years, but the average has been nearly 128,000 medical calls per year since 2019. It is difficult to predict the number of medical calls the agency will receive in the future, but with the increase in population and the prevalence of mobile cellular communication devices, it is expected to rise.



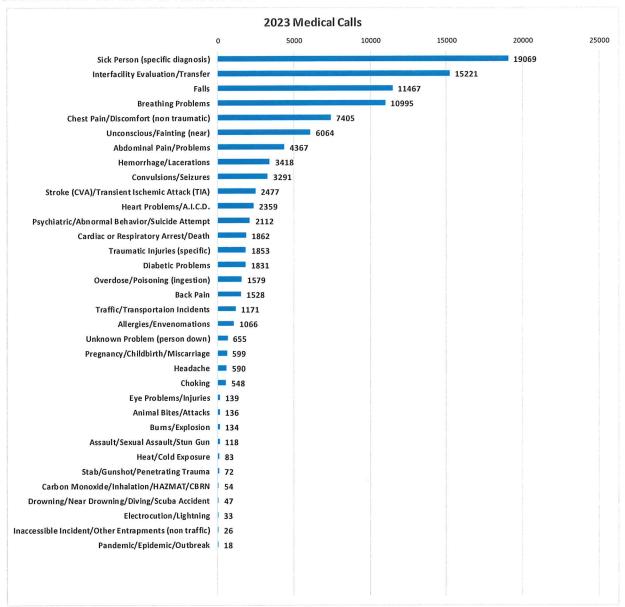
Types of EMD Calls and Compliance

The two charts below show the most frequent types of EMD (Emergency Medical Dispatch) calls the agency has received since the implementation of EMD on July 26, 2022. Sick Person (10,219 calls; 20.2%), Interfacility Evaluation/Transfer (6,007 calls; 11.9%), Falls (5,764 calls; 11.4%), and Breathing Problems (5,453 calls; 10.8%) accounted for the highest number of EMD calls from the implementation of EMD on July 26, 2022, through December 31, 2022. These four types of medical calls accounted for 54.3% of all medical calls during this time.

Interfacility Evaluation/Transfer type medical calls are requests from nursing homes, assisted living facilities, and other skilled health care facilities that request emergency medical aid for patients or residents of these locations.



During calendar year 2023, Sick Person (19,069 calls; 18.6%), Interfacility Evaluation/Transfer (15,221 calls; 14.9%), Falls (11,467 calls; 11.2%), and Breathing Problems (10,995 calls; 10.7%) accounted for the highest number of EMD calls. These four types of medical calls accounted for 55.4% of all medical calls in 2023.



EMD Compliance

Principal Supervisors from the Quality Assurance Unit (QAU) continually monitor, evaluate, and assess the agency's level of compliance with EMD protocols and provide frequent feedback and communication to the telecommunicators on their level of compliance and proficiency. QAU members also provide periodic training sessions to assist telecommunicators with their confidence and competence levels. This intense concentration of supervision and instruction has a positive influence on performance improvement and overall job satisfaction, which also directly contributes to enhanced public safety services.

TRAINING

RI E-911 conducts an extremely comprehensive and demanding training program for new personnel. After the interview process, successful candidates are invited to a formal orientation. During the orientation, candidates are made aware of the specific job requirements and expectations, especially what is required of them as an "essential public safety" employee for the State of Rhode Island. During orientation the candidates are given basic information on what the job duties include, what they can expect working in an E-911 environment, the training process and development expectations, the reality concerning the nature of calls normally received, and other vital information related to employment as an E-911 telecommunicator.

Successful candidates are required to undergo and pass the following job prerequisites before beginning the training process to become an E-911 telecommunicator.

- (a) a criminal background check,
- (b) a physical examination,
- (c) a psychological evaluation,

New employees are required to participate in a training program which will last for approximately three to four months and includes, but is not limited to the following:

- a) reviewing rules, regulations, protocols, policies, and procedures,
- b) monitoring 911 calls for review, feedback, and commentary,
- c) familiarizing themselves with the agency's software and hardware programs,
- d) learning the agency's workflow and nomenclature
- e) taking live 911 calls in a controlled and supervised environment,
- f) CPR certifications
- g) Emergency Medical Dispatch certification
- h) Incident Command Training
- i) listening to guest speakers from various state or private agencies as well as representatives from certain specialties whose clients call 911 for help or assistance.

RI E-911 plans to offer ongoing learning opportunities, such as, stress management, autism awareness, HAM radio operator, management for supervisors, armed assailant, EMD continuing education credits, and a myriad of other public safety topics and areas of concentration. We are also exploring the necessary steps to become an accredited agency at some time in the future.

PANDEMIC RESPONSE

Over the past three years, RI E-911 has had the responsibility of operating a critical 24x7x365 operation during the continuation of the COVID-19 Coronavirus Pandemic. RI E-911 noticed an apparent correlation between the announcement of shelter-in-place orders and a reported temporary spike in call volume relative to callers afflicted with symptoms of COVID-19, opioid related calls for service, and domestic violence related calls. These call categories were tracked and forwarded to the RI Department of Health and the RI Department of Public Safety for additional analysis and assessment.

COVID-19 has affected the anxiety and stress levels of our entire staff, and the agency has been proactive by offering various support services that promoted staff wellness during the height of the pandemic.

RI E-911 has taken specific wellness measures including but not limited to some of the following:

- Promoting Employee Assistance Programs (EAPs)
- Arranging stress management presentations.
- Timely and consistent updates from the RI Department of Health
- Dissemination of wellness webinars, articles, and related resources
- Arranging for visits from service animals

RI E-911 had to implement measures to ensure the cleanliness of the PSAP and the health of the staff. The measures were taken to avoid stifling the operational effectiveness due to a widespread infection transmission and/or quarantining protocols. The following measures were implemented:

- Activation of the Alternate PSAP
- Health screenings
- Changes to minimum staffing requirements
- Ample supplies of PPE
- New policies/procedures relative to PSAP cleanliness and social distancing measures
- An option for technical and administrative staff to work remotely.
- Taking employees temperatures at the start of shifts
- Installing UV disinfectant lights inside HVAC systems
- Prohibiting non-PSAP personnel in the call center during potential high virus transmission periods

The pandemic was unexpected and caused all of us to alter our normal way of living and working. The sudden adjustments that were necessary have prepared us to be able to deal with similar situations if it were to occur again.